



## NOAA Licensing Opportunity

# NO<sub>y</sub> Cavity Ring-Down Spectrometer

## LICENSING OPPORTUNITY: NO<sub>y</sub> Cavity Ring-Down Spectrometer (NO<sub>y</sub>-CRDS)

NOAA is now seeking manufacturers/licensees to deliver its Patent-Pending NO<sub>y</sub> Cavity Ring-Down Spectrometer to market in the United States and globally. Ideal partners will have a proven track record in manufacturing quality scientific instruments domestically and a proven distribution network both in the U.S. and abroad.

NOAA offers a wide variety of licensing solutions with flexible terms and reasonable rates. Our licensing process is fast-tracked to allow licensee(s) to move the product from license to manufacture to market in the shortest possible time.

To learn more, contact the NOAA Technology Partnerships Office or visit our website at <http://www.technologypartnerships.noaa.gov>



## Benefits of the NO<sub>y</sub> Cavity Ring-Down Spectrometer:

The NO<sub>y</sub>-Cavity Ring-Down Spectrometer is a sensitive, compact detector that measures total reactive nitrogen (NO<sub>y</sub>), as well as NO<sub>2</sub>, NO and O<sub>3</sub> using cavity ring-down spectroscopy (CRDS). This product is unique in that the optical cage system holds four optical cavities (with associated sample cells) and a laser together, allowing a measurement of all four trace gases simultaneously and with a robust calibration in a small package. The NOAA CRDS is compact and has lower power, size, weight, and vacuum requirements than chemiluminescence-based instruments while approaching equivalent sensitivity, precision and time response.

## Market Analysis:

Climate science and air quality monitoring provide ongoing applications for instrumentation to accurately measure atmospheric trace gases. The precision and accuracy of this instrument make it a versatile alternative to standard chemiluminescence-based NO<sub>y</sub> instruments currently on the market.

The markets for scientific instruments in the U.S. and abroad are well-established and supported by a number of known scientific instrument manufacturers, including at least three domestic and three international commercial manufacturers of a cavity ring down NO<sub>2</sub> instruments. Given the compact and efficient performance and other unique features of this instrument for measuring ambient air across a range of environments and measurement platforms, it is an excellent licensing opportunity for the scientific instrument manufacturing sector.

**NOAA Technology Partnerships Office**  
Promoting Partnership & Commercialization of NOAA Innovations

<http://www.techpartnerships.noaa.gov>

1305 East West Highway  
SSMC4, Suite 7602  
Silver Spring, MD 20910  
Tel: 301.713.3565